

**AUDIO OSCILLATOR TRAINING AID, DEVICE 6B32****TRAINING CATEGORY:**

BASIC SCIENCE (Electronic)

ORIGINATING AGENCY:

CNET

SECURITY CLASSIFICATION:

Device 6B32 is unclassified.

INTENDED USE:

The training aid is used to teach electronic students the operation of four (4) different types of sinewave oscillators. The student obtains a better understanding of each type of oscillator by measuring signal voltages on the oscillator PC Boards.

FUNCTIONAL DESCRIPTION:

Device 6B32 is a solid state, variable frequency audio oscillator from 10 Hz. to 100k Hz., utilizing four (4) different types of oscillators.

The frequency control dial, frequency multiplier and voltage amplitude control are located on front panel. The training aid contains a transformer type regulated DC power supply.

An emitter follower complementary pair audio power amplifier is provided to amplify the output of the audio oscillator printed circuit cards.

The four (4) PC Boards provided are:

(1) "Bridge-T" sinewave oscillator controlled by frequency control dial and multiplier switch. Oscillator operates from 10 Hz. to 100k Hz. and multiplier provides X10, X100, X1000 and X10,000 with minimum of 10 dBm output.

(2) "Wien Bridge" sinewave oscillator with fixed frequency output of 500 Hz. and 10 dBm minimum output.

(3) "Phase-Shift" sinewave oscillator with fixed frequency output of 1,000 Hz. and 10 dBm minimum output.

(4) "Colpitts" sinewave oscillator with fixed output frequency of 5,000 Hz. and 10 dBm minimum output.

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The PC Boards are horizontally mounted with components exposed when top or bottom cover is removed. All parts are identified by schematic number.

Numbered test points are located at input and output of circuits so student can readily measure system performance.

PHYSICAL INFORMATION:

Device is 5-1/4" High x 7-1/2" Wide x 11" Long. Weight - 7 lbs net. Removable 3-wire power cord.

ENVIRONMENTAL CHARACTERISTICS:

Classroom environment.

EQUIPMENT REQUIRED (NOT SUPPLIED):

1. Audio Amplifier Device 6B31
2. Oscilloscope
3. Volt-ohm Meter

INSTALLATION AREA:

Classroom

POWER REQUIREMENTS:

115 V, single phase, 50/60 Hz.

PUBLICATIONS FURNISHED:

Device Instruction Manual

PERSONNEL:

Electronic Students.

CONTRACT IDENTIFICATION:

Manufactured by NIDA Corporation, Stamford, CT under NAVTRASYSCEN Contract No. N61339-76-C-0123.

LOCAL STOCK NUMBER:

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